

AMENDMENTS TO THE CLAIMS

1. (currently amended) A metronome apparatus which indicates consecutive timing of beat of music with moving tempo, comprising:

first means for reading out numeric data about each of all individual beat duration times stored in memory or media;

second means for getting next consecutive beat timings by transforming using a timer, which is set to each of said numeric data of beat duration times at into time length from beginning of each beat timing of current beat one by one; and

third means for indicating the beat timing acquired by second means using visual, audio or other output.

2. (currently amended) A metronome apparatus claimed in claim 1, further comprising:

fourth means for input of all individual beat timings with a button or same functional device operated by user for initial input or partial modification purpose; and

fifth means for recording beat duration time data acquired by fourth means on memory or media.

3. (currently amended) A metronome apparatus claimed in claim 1,

wherein the third means is a display for showing baton-like movement, by control illuminating point so that downward movement changes to upward movement at the timing of beat up and down on a vertical array of illuminating devices, and further comprising:

sixth means for calculating illumination point from time elapsed from beginning of the beat;

seventh means for wherein by controlling illuminating time ratio of two adjacent devices when the calculated illuminating point comes falls between these two devices, movement of illuminating point looks smooth,

wherein downward movement changes to upward movement at the timing of beat.

4. (currently amended) Computer readable memory containing computer program to indicate consecutive beat timing of music with moving tempo, said program comprising:

first program for reading out numeric data about each of all individual beat duration time stored in memory or media and get beat duration time one by one;

second program for getting consecutive next beat timing by transforming said numeric data detecting time elapsed of duration time into time length from beat timing beginning of current each beat reaches said each duration time one by one; and

third program for indicating the beat timing acquired by second program by visual, audio or other output.

5. (previously amended) Computer readable memory containing computer program claimed in claim 4, the program further comprising:

fourth program for input of all individual beat timings from a mouse or other device operated by user for initial input or partial modification purpose; and

fifth program for recording each of all individual beat duration data on memory or media based on input by fourth program.

6. (previously amended) Method of production of music minus one or karaoke, wherein sound of a part is excluded in recorded sound, utilizing computer program stored in memory in claim 5, comprising:

first step for sound recording of performance by all members including said part to be excluded;

second step for input of all individual beats in whole music in the way an operator inputs beat timing using fourth program along with music sound of the first step performance, and fifth program records every duration data of the input;

third step for sound recording of performance excluding said part, wherein the performance is played in the same tempo with the performance of the first step, using the first computer program for reading out the duration data of each beat made in the second step and the second and the third computer program for indicating the beat one by one according to the duration data; and

fourth step for writing the recorded sound made in the third step on media or producing copies of it.

7. (previously amended) Method of claimed in Claim 6, wherein the media in the fourth step is delivered in the way that duration data of all individual beats of the second step is combined with recorded sound of the third step on separate track of the same media, including but not limited to compact disk, or on each individual media, said duration data being to be used at end-user in the same way with said third step.

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (previously amended) A metronome apparatus claimed in claim 3,

Wherein upmost and down-most position of said point of attention change according to combination of meter and sequence number of beat coming next in a bar.

12. (Canceled)

13. (newly added) A metronome apparatus claimed in claim 2, further comprising:

a second button or same functional device:

eighth means for replacing partial duration data at corresponding beat positions in said memory with newly input duration data only while said second button is depressed.

14. (newly added) A metronome apparatus claimed in claim 2, further comprising:

ninth means, being activated when said button is depressed during the metronome is playing, for finding a nearest timing of first beat of bar from said button depressed timing, either already passed or will be reached later,;

tenth means for replacing all duration data of beats corresponding to positions from starting point to ending point with each multiplied value by a ratio of time length spans from time of starting point until time of depression of the button against time length spans from time of starting point until time

of said nearest first beat of bar, wherein said starting point is either top of music or tempo signature changing point, and said ending point is either end of music or tempo signature changing point.

eleventh means for restarting playing from said nearest first beat of bar.

15. (newly added) Computer readable memory containing computer program claimed in claim 5, the program further comprising:

sixth program for replacing partial duration data at corresponding beat positions in said memory with newly input duration data only while a second button of mouse or same functional device is depressed.

16. (newly added) Computer readable memory containing computer program claimed in claim 5, the program further comprising:

seventh program for being activated when a button on said mouse or same functional device is depressed during second program is running, and finding a nearest timing of first beat of bar from said button depressed timing, either already passed or will be reached later,;

eighth program for replacing all duration data of beats corresponding to positions from starting point to ending point with each multiplied value by a ratio of time length spans from time of starting point until time of depression of the button against time length spans from time of starting point until time of said nearest first beat of bar, wherein said starting point is either top of music or tempo signature changing point, and said ending point is either end of music or tempo signature changing point.

ninth program for restarting playing from said nearest first beat of bar.